App. F. IX-4

PRESERVED

1929-30 (C. V)

File No. 41-29

Serial Nos. 1-7

Previous References
C. V 38-28 (1-2)

PRESERVED

Later References
C. V. 40-30 (1-3)

P. 3/1(E)

General and Revenue Secretariat.

Serial Nos. Seven

Part B for Apl-30.

SUBJECT

Annual report on the Working of the Indian Institute for 1928-29

6891-2 dt 10.12.29.

To Dir of Agri. & Surgeon.

Record with certain Observations Ri

General and Revenue Secretariat | C/ File No. 41 | App. F. III—2] of 192 9

Telegraphic Address "Agri., Bangalore."
Code—5th Edition A. B. C.

C.R. 41-29-1.

DEPARTMENT OF AGRICULTURE,
MYSORE STATE.

In reply please quote in full the Nos. and indicative symbol given below.

Per 45/29-30.

BANGALORE,
September 10, 1929

FROM

LESLIE C. COLEMAN, ESQ., M.A., PH.D.,
DIRECTOR OF AGRICULTURE IN MYSORE,
BANGALORE.

GEN. & REV. SECRETARIAT 2297 SEP 29 DEVELOPMENT BRANCH

To

N. Rama Rao, Esq., B.A.,B.L.,
Secretary to the Government of Mysore,
Development Departments, Bangalore.

SIR,

I have the honour to forward herewith in triplica the Annual Report of the Serum Institute for the year 1928-2 together with my introductory remarks.

I have the honour to be,
Sir,
Your most obedient servant,

Leslie C. Coleman
Director of Agriculture.

dsr

W 9/29
CR 11/9
10.9.29

Subd 1 one Copy will be sent to the Ad. Report Sec.
2 Draft to the Supdt Govt Printing put up
A.R. Section in the first instance
13/9
14/9/29
CR 14/9
Issued N.D. 30763/18
to the Supdt. Govt. Press
Forth a copy of the portion
last lastly him to Bel the same in App

Subd With previous refces for order
Kind refce is invited to para 5 of the "Introduction & paras 21 & 25 of the Report which show that the Cost for the State of a dose of Serum produced works out to less than half an anna & that for a dose of Virus it is less than an anna. These appear to be info

ote—Contn. Sheet

WD 01684—GPB—30,000—20-4-29

General and Revenue Secretariat

C File No. 41

Serial No.

A

-ation of Commercial Value and as such it is for orders whether the report shall be published + placed at the disposal of the Press.

B

2 The question of locating the Serum Institute in a healthier locality covering a large area is under Consideration separately.

3 Whether the report should be recorded as in last year is for orders.

Ed 19/9

4 A. Not desirable.

5 B. May be recorded.

VS 19.9.29 Secy

Cr 21.9.29

6 with a brief notice of the salient points.

WK 10/10 29

7 Subd with draft

Ed 21/10 VS 23.10.29

8 Opl. for approval

Secy

Cr 6.11.29

2nd Member 9 Please put up clean opl

WK 9/11/29

10 Typed draft put up

Cr 9/11

Ed 19/11 VS Secy 12

Cr 19.11.29

2nd Member WK

OFFICE OF THE SECOND MEMBER OF COUNCIL 26 NOV. 1929 No. 4-2050

Contn. Sheet

WD 01684—GPB—30,000—20-4-29

General and Revenue Secretariat | C.V. File No. 41 | App. F. III—2] of 1929

Serial No. 3.

To D. 6391-2/ dated 10/12/29

The Director Pasteur
& Senior Surgeon

Records with certain remarks the Annual Repo
on the working of the Serum Institute for 1928-29

OFFICE OF THE SECOND MEMBER OF COUNCIL 20 DEC. 1929 No. 6977

16
Subd with a D.F.N
20/12/29
(Ind. Asst.)

15 CSM 23/12

Cir 20.12.29

16
The final note may be kindly signed.
Subd-
26.12.29

24.12.29

DEWAN'S OFFICE 6. JAN. 1930 No. 2928

17 Final note signed by the Member is placed in the file.

7/1/30

18
Subd with D.S.N
27/1/30
(Dewan)

Contn. Sheet

WD 01684—GPB—30,000—20-4-29

Final Note by the Second Member of Council.

4

Subject:— Annual Report on the working of the Serum Institute for the year 1928-29.

To

The Annual Report on the working of the Serum Institute for the year 1928-29 with the Government Review thereon is submitted for the gracious perusal of His Highness.

C. S. Balasundaram

MEMBER OF COUNCIL.

Camp Sagar,
1st January 1930.

Submitted to His Highness.

5

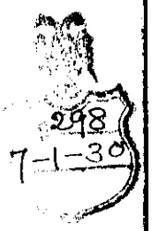
I submit herewith a Final Note by the Second *Member of Council on the subject of* the Annual Report of the Working of the Serum Institute for the year 1928-29 with the Government Review thereon for His Highness' gracious ~~approval~~ perusal.

M N Lakshmana Rao
Dewan. (In charge)

Bangalore.
January 1930

Record of Cases submitted for the Orders of His Highness the Maharaja.

Subject.



Report on the working of the Serum Institute for the year 1928-29 and Government Review thereo

22

Order.

KRW

9/1/30

C.V.-41-29-4

Karapur Camp,

11th January 1930.

PRIVATE SECRETARY MYSORE
22 JAN. 1930
DEVELOPMENT BRANCH

My dear Mirza,

23 In returning herewith your file No.398 of the 7th instant on the subject of the working of the Serum Institute, I am desired by His Highness the Maharaja to ask you to be good enough to see if something cannot be done to reduce the mortality rate among the buffalo calves used for the operations, and to observe that the marching of these calves, when already exhausted by the operations, down to the Subramanyam Jatra and back again seems to have been a very ill-advised step.

24 I am to add that His Highness is fully appreciative of the excellent work done by the Serum Institute and of the difficulties under which the staff worked, and that these remarks should not be taken as detracting from his appreciation of the good work done.

Yours sincerely,

Serial No.

28 Lab^d with or w- no remarks of the Minister

Cer 24/1 29 Offr for approval

Copy of

5775/29/1

2^D Member)

30 28/1/30 Cer 29/1

31

29/1/30

32 Issue

30/1/30 Cer 30/1

5- O·8561 dated 31/1/30 I The Director of Agri: enquires if something cannot be done to reduce the mortality rate of buffalo calves used for the operations connected with the production of Serum & virus and states that the marching of the calves to Subramanya Jatra & back when they were already exhausted was a very ill-advised step.

6 D^o. N^o Per N^o 4 Sq 29-30 of 4/2/30 from the Director of Agriculture. Explains the circumstances under which Buffaloes were marched to Subrahmanya Jatra Sub^d Plans & Estimates for buildings for the Serum Institute are it is said

Note—Contn. Sheet

Serial No.

awaiting Superintending Engineer's [illegible]
Vide Bangalore Dy. Ex. Engr's Letter No 2087/29
Submitted separately. A D.N. is also Subd.
Ref:— para 27 of the member's minute.
6/2/30

Secy)

34

7/2

35 The explanation given by Dr C Rennie seems to show that the animals sent to Subrahmanya patna were in great part grown up buffaloes in fair condition and that all possible precautions were taken to see that they did not suffer on the journey. The mortality does not seem to have been due to the marching. The explanation may perhaps be sent to H. H.

36 A D.N. is put up for approval

2nd Member)

12 2 30

13/2

6163-
13/2

37

38) Final Note signed by the Member is put up.

14/2/30

39) Subd with S.N.

14 2 30

40)

D.S.N. Subd

14/2/30

Note—Contn. Sheet

Clean type

15/2/30

App. F. III—91

General and Revenue Secretariat

File No. 41

Serial No. 42

Typed

Ext

1872

Devanagari

43

Ext

1872/30

Note—Contn. Sheet

WD 066—GPB—80,000—EQ-7-87

Final Note by the Second Member of Council.

Subject:—

44) Mortality among the Buffalo Calves belonging to the Serum Institute, sent to the Subramanyam Jatra.

47) With reference to His Highness orders contained in demi-official letter No.82 dated the 12th January 1930 from the Private Secretary to His Highness regarding the marching of some of the "done" Buffalo Calves belonging to the Serum Institute, to Subramanya Jatra for sale, I beg to submit for the gracious perusal of His Highness a demi-official letter from Dr. Coleman (No.Per. No.45 of 1929-30 dated the 4th February 1930) explaining the circumstances in which the step was taken, and the precautions that were adopted to see that the animals did not suffer in the way. It would seem that the mortality was due to unexpectedly inclement weather.

46) The heavy mortality in the Serum Institute is due to the unfavourable conditions under which work has at present to be carried on; and it is hoped that it will be possible to reduce it considerabl when the Institute moves into the new buildings which have recently been sanctioned.

C S Balasundaram

MEMBER OF COUNCIL.

Bangalore,
14th February 1930.

12

Submitted to His Highness.

I submit herewith a Final Note by the Second Member of Council on the subject of the mortality among the buffalo calves belonging to the Serum Institute sent to the Subrahmanya Jatra for His Highness' gracious perusal.

Mirza M. Ismail

Dewan.

Bangalore,
18th February 1930.

6624

12

Record of Cases submitted for the Orders of His Highness the Maharaja.

Subject.

48 Letter from Dr L.C. Coleman explaining the mortality among the buffalo calves of the Serum Institute that were sent to the Subrahmanya Jatra.

Order.

49

K.K.W.

25/2/30

Phone 28.2.30

KK 27/2/30

Serial No.

50

Subd. with draft to the Supdt Govt Press.

Cash 1/3

VS 5/3

Issue Ca 3/3/30

7. ~~Ltr~~ D 10015/ dated 6/3/30

To The Supdt., Govt. printing.

Forwards copy of the Govt. renewing the Report on the working of the Serum Institute for necessary action.

Subd Printed Copies of the Addl Report of the Serum Institute for ~~Govt~~ 28pg with the Insptrs review have been received. It is for orders whether copies of the report should be sent to the Director of Agriculture & if so whether he should be informed that the report has not been placed at the disposal of the Press. copies of the report will not be sent to the Residency if applied on the analogy of the S. O. 7 reports.

A

B/

Cash 3/4 secy

I agree Ca 5.4.30

VS 5/4

9 4 30 Ca 9/4

Govt C 4/3

A. Does not appear necessary. The Report has to be treated as confl as in the case of S.O.7.

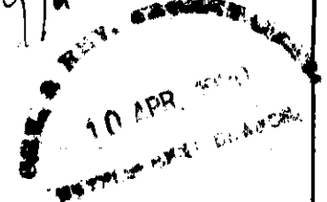
VS

B. Not necessary

VS 3.4.30

9/4

B 9/4



WD 01684—GPB—30,000—20-4-29

Introduction

The Report of the Mysore Serum Institute for the year 1928-29 is a record of very marked expansion under difficult conditions. At the time the budget was framed, it was estimated by the Superintendent Civil Veterinary Department, that 8 lakhs of doses of Anti-Rinderpest serum (or approximately 60% more than the supply for the year 1927-28) would be required during the year. The estimates were submitted on that basis.

2 The steady increase in the number of outbreaks of rinderpest made it soon apparent, however, that the requirements had been very greatly underestimated. Thus over four lakhs of doses of Anti-Rinderpest serum or more than 50% of the total estimate was used during the first three months of the year. It became necessary therefore to submit a supplementary estimate for Rs.80,000/- bringing the total up to Rs.1,80,000/- for the year. I have to express my thanks to Government for the prompt and sympathetic manner in which this unexpected demand was met. The result has been that the Institute has been able to produce 17,68,361 doses of antirinderpest serum against 18,00,000 doses estimated for. That the production did not exceed the estimate has been due entirely to stoppages -- brought about by outbreaks of foot and mouth disease among the -- animals used for serum and virus production and on one occasion to infection of virus by extraneous organisms.

3 For these stoppages the officer in charge of the Institute and his staff cannot I believe, be held responsible. The demand for both serum and virus was so great that it was absolutely necessary to work on large numbers of animals at a time, and when we remember that a total of 3597 animals collected from various parts of the State were used in the Institute during the year and further that 450 animals at a time had to be kept in a space hardly exceeding two acres in extent, it is a matter for congratulation that no more serious stoppages occurred. We have been experiencing one of the severest waves of rinderpest that this State has experienced since the establishment of the Civil Veterinary Department and under such -- circumstances risks must be taken. I feel strongly, however, that it is unfair to the staff of the Institute to expect them to continue large scale production of serum and virus under the present un-

satisfactory conditions. To remedy this state of affairs proposa have already been submitted to Government for the transfer of the Institute to a much larger and more suitable site and I trust the transfer will be effected before the end of the present year.

4 The production of virus has almost but not quite kept pace with that of serum. The production of the former was over three times that of the previous year; the production of virus about two and a half times. The reason for the difference lies in the fact that while serum can be prepared ahead of demand and stored over considerable periods, virus must be prepared as required. -- Hence any stoppage of work has a more direct and serious effect upon virus production than on serum production. As a matter of fact the stoppage of virus production led to the necessity for drawing virus in the field, a practice which was followed to a considerable extent by officers of the Civil Veterinary Department during periods when the virus supply temporarily failed.

5 The cost of both serum and virus production has been -- extremely low. The cost of the former calculated on the quantity sent out has been less than 6 pies per dose, that of the latter less than 1 anna per cubic centimetre. Supplies of serum obtained from the Imperial Veterinary Institute at Mukhtesar before the establishment of the Serum Institute cost us 3 annas per dose plus transport charges or over six times as much. On the basis of serum produced there has been a saving of over Rs. 2½ lakhs through the local manufacture of the serum. In addition it seems very unlikely that we should have been able to procure anything like as large a supply from Mukhtesar, as the total annual production of antirinderpest serum from that institution is only about three times the amount produced in our Institute.

6 The quality of the anti rinderpest serum produced was uniformly good. One and a half lakhs of doses were sold to the Madras Veterinary Department. The demand was for a larger quantity but I had to order the export stopped on account of the needs of the State. At the time the supply was made to Madras large reserves were in stock, hence the sale.

17

7 The efficient manner in which the work of the Institute has been carried out reflects great credit on Dr. Parthasarathi and the staff of officers and men working under him.

******

Director of Agriculture.

ANNUAL REPORT OF THE MYSORE SERUM INSTITUTE FOR THE YEAR 1928-29.

GENERAL. The Institute continued to work in the outhouses of the Office compound buildings in of the Ch Commandant. During the latter part of the y 1927-28, as it was found that the work had to be increased both as regards Serum and Virus account of the increased demand from the Civil Veterin ry Department, the accommodation was found to be too small. Arrangements were made to construct three more sheds. This year it was found that even the five sheds were not enough to accommodate the Serum producers, to meet the demand for Serum.

2. An estimate for producing 8 lakhs of doses of Serum was made at the beginning of the year and as it was found that much more than 8 lakhs would be required, a revised estimate for the production of 18 lakhs doses of Serum was made and sanction of Government was obtained. The total amount sanctioned for expenditure during the year under report was Rs.1,80,000/- of which Rs.12,000/- was meant for remodelling of the Old Sowar Lines to which place the Institute was proposed to be shifted and Rs.5,000/- sanctioned for constructing three sheds and putting up of fences in Bettahalli kaval where the "donor" animals and some of the reserve animals are kept.

3. The Old Sowar Lines could not be remodelled as the place was not handed over to the Depart-

ment

Department; the money available under 'Buildings' was partly spent for buying some more Virus animals, by reappropriation of grants, as the amount available as per original sanction was insufficient to buy all the required number of calves during the year.

4 ANIMALS. Local he-buffaloes were made use of throughout the year for producing Serum, paying Rs.40/- per head as a cost of animal.

5 The Virus animals used at present are buffalo bull calves and are obtained from a number of suppliers. The bull calves that are now made use of for purpose of Serum testing, are purchased from Malnad areas by one of the Veterinary Inspectors sent out for the purpose. The Serum animals are at present supplied by a contractor.

6 Difficulty is still found in disposing of animals. At the beginning of the year, the number of done buffaloes and calves were so large and the fecilities for grazing them were so poor that the animals had to be maintained by stall feeding. Hence, 140 buffaloes and 70 calves were sent to Subrahmanya Jatra near Udipi for sale. On the way to Jatra 23 buffaloes and 5 calves died. While returning, 19 died at Saklespur on account of the heavy rain and extreme cold in Malnad area and partly due to the bad condition of the animals. The arrangement to sell them at Jatra was made as nobody came forward for the purchase of the animals. Later on, tender

tenders were called for for the purchase of done animals. Nobody put in tenders. Hence, the done animals had to be kept and fed in some kaval, as Bettahalli, until a sale was found for them. Cattle dealers from Coimbatore have offered a fair price in lots and they bought some buffaloes and calves. Some animals were sold to the local raiyats whenever they required any.

7 As nearly 450 animals a day had to be accommodated within the small space available in the Institute, epidemics of infectious diseases occured, foot and mouth on three occasions, Haemorrhagic Septicaemia once in the month of May 1929. This led to the temporary stoppage of production of both Serum and Virus.

8 **KAVALS.** During the year, two kavals and one reserve depot were made available for the animals of the Institute. Kenchanahalli kaval, about 56 acres in extent, close to Yelahanka, which was under the Military Department, was handed over to the Institute on 26th February 1929. In the beginning, it was made use of for grazing the Institute animals in the kaval when there was scarcity of pasture in the Mandlakunte estate which was taken on rent for the use of done animals. Later, when Bettahalli kaval was made available, the animals were removed from Kenchanahalli kaval. The latter has been made use of for accommodating the ailing and contact animals when any epidemic of infectious disease breaks out in the Institute. On three occasions animals suffering from infectious diseases were

were accommodated in the kaval. Bettahalli kaval has been leased out to the Institute by the Forest Department on a rental of Rs.228-6-0 per annum as per G.O.No.D.3955-7/C.V.16-28-25 dated 4th October 1928, for grazing the Institu animals. The kaval is meant for grazing of th done animals and to keep under observation the newly purchased animals before they are brought for use in the Institute. In the month of February, forest fire destroyed the pasture in the kaval forest leaving very little of it in the kaval. The "done" animals were allowed to graze on the remnents of pasture available.

9 Four Three temporary sheds with an enclosure and another enclosure of one woven wire fencing were arranged to be put up during the year. The sheds are ready and the enclosures are yet under construction. When the enclosures are ready, the quarantaining of the purchased animals will be started.

10 The compound of the Office of the Superintendent, ~~Amritmahal Department~~ Civil Veterinary Department, on the Lalbagh road was continued ~~to be made available~~ used for as a subsidiary depot till that office was shifted to another building closeby. The outhouses and Compound of the Office of the Superintendent, Amritmahal Department were temporarily placed at our disposal to accommodate the reserve stock of animals before any other convenient place could be fixed for the purpose. Arrangements had subsequently to be made for accommodating the animals

animals in a subsidiary depot so that a week's supply ~~may~~ might be handy for use in the Institute. And when Serum producers are bought, they have to be given rest and fed for about a week before they are used for Serum production. A subsidiary depot was opened in the Choultry adjoining the Sampangi tank, a private property belonging to one, Mr. Doddi Appayyanna Chetty at a rental of Rs.30/- per mensem, vide, G.O.No. D.10334-5/C.V.70-28-4 dated 6th April 1929. The period of occupation of the Choultry was sanctioned till the end of June 1929 and has since been extended till the end of June 1930 as per G.O.No.D.2040-41/C.V.70-28-8 dated 21st August 1929.

11 EXECUTIVE ESTABLISHMENT. The executive establishment during the year under report, consisted of one Assistant Superintendent, 6 Veterinary Inspectors, 9 Salustries, 3 Attendants one Carpenter, one Maistry and 57 cattlemen.

12 For purposes of work, the establishment is divided into two main sections, Virus section and Serum section.

13 The Virus section consists of one Assistant Superintendent, one Veterinary Inspector, one Salustry and 9 cattlemen and the Serum section, 5 Veterinary Inspectors, 8 Salustries, and 48 cattlemen and 2 Dhobies.

14 The total number of cattlemen employed at the beginning of the year was 38. During the

course

course of the year, as the work of the Institute increased, 19 more were appointed as per G.O.No. D.6899-606/C.V.73-28-2 dated 22-12-28 and No.D. 13527/C.V.164-28-2 dated 22-6-1929. Some of the cattlemen had to be distributed to the kavals, 6 to Bettahalli, 6 to Subsidiary depot, 3 to Kanchanahalli and the rest are working in the Institute proper. The services of the cattlemen are made use of at the Institute not only for tending the cattle, but also for other works, as Attendants in Laboratory, Attendants in Serum room, as bottle washers and attendants in Sterilising room.

15 LABORATORY SECTION. This section is looked after by the Officer in charge with the help of one Veterinary Inspector and one Laboratory Attendant. The work in the Laboratory consisted of the microscopic examination of blood of every animal brought into the Institute, routine examination of Virus blood, microscopical ~~exkkmmat~~ and cultural. Post mortem is done on every animal that dies in the Institute.

The total number of microscopical examinations made in the year was .	4,559
Cultural test done for Virus from 5-3-29 to 1-7-29 was . .	266
Post mortem done during the year .	2,895

In addition, sterility tests are done with the Serum produced in the Institute.

16 OFFICE. The ministerial establishment consists of one Accountant, one clerk, one chart clerk and one Store keeper. The work

in the Institute has ever been steadily on the increase and as such, it was therefore impossible to carry on the routine clerical and accounts work of the Institute and to attend to the timely submission of reports and keeping up of accounts up-to-date, as the one Accountant had to look after all the accounts and clerical work ~~in spite of his putting in nearly 9 hours of work every day~~. Hence, recommendations are sent to Government for increasing ~~xx~~ the Office establishment by one Head Accountant and one more clerk, so that, accounts and all the necessary registers may be opened and properly maintained. The sanction of Government is awaited.

17 V I R U S. The work of the Institute consisted in the manufacture of two bacteriological products, Rinderpest Virus and Anti-Rinderpest Serum. At the beginning of this year, difficulty was felt in supplying sufficient a quantity of Virus to meet the demand of the Civil Veterinary Department, as a large number of animals that did not show all the clinical signs of Rinderpest, which is at present the only way of recognising the disease, were rejected and as a large percentage of calves were found to be infected with piro. Experiments were done to find out whether any animal could be made use of for Virus production. It was found that buffalo bull calves were more useful as they can be bled more, as they do not suffer from piro infection quite so much and as they are cheaper than bull calves. The cost of Malnad bull calves ranged from Rs.20/- to Rs.30/- each and the

the cost of the buffalo calves Rs.18/- and Rs.16/-.

During the year, 229 bull calves and 2,061 buffalo calves were made use of in the manufacture of Virus against 1,130 bull calves for previous year. The total number of Malnad bull calves bought were 403 of which 229 were made use of for Virus, 140 for Serum test, 31 died while waiting, one was carried away by a tiger and two were on the stock unused at the end of the year. Among the buffalo calves, about 10% could not be bled as the clinical signs were not evident in time. Out of 2,274 calves used for Virus production, 1,883 died, with a death rate of 83% as compared with 32% death among the bull calves used during the year 1927-28. The high death rate is due to the greater susceptibility of the buffalo calves.

15 During the latter part of the month of April 1929, Virus was produced in the Institute as usual and supplied. Some of the animals which were injected in the Institute with the Virus got swellings; immediately the production of the Virus was stopped and the matter was investigated. It was found that the blood was contaminated with a bipolar organism and in some cases with Streptococci. Later, reports were received from the Civil Veterinary Department that 6 consignments of Virus sent to them gave rise to abscesses in the animals, similar to those produced what happened in the Institute. On investigation, it was found that the source of contamination could be traced from the place where the post mortem was done

which adjoins the stalls where the Virus animals ~~are stalled~~ had to be kept and ~~also due to~~ the congestion caused by the large number of animals accommodated in the small space available in the Institute, the average number of animals stabled in the Institute daily being 480. Till this has been the real incident, Virus produced was being sent on the very cause of the trouble. same day of production to the Civil Veterinary Department on account of the urgent demands. After the above incident, arrangements have been made to send the Virus only after bacteriological examination, i.e., microscopical and cultural tests and some times animal tests are also made. This, no doubt, entails a delay of at least two days after the production of Virus.

Quantity of Virus produced during the year . . .	10,10,150 c.c.
Quantity supplied to Mysore Civil Veterinary Department. .	9,36,575 c.c.
Quantity supplied to Madras Civil Veterinary Department	16,400 c.c.
Quantity used in the Institute	32,500 c.c.
Quantity of Virus discarded .	24,675 c.c.

Cost of calves paid during the year. Rs.37,606-5-0		
Cost of calves used in the Institute during the year 28-29 and paid after July 1929 . . .	974-0-0	38,580-5-0
Establishment charges (The pay of Virus section, half of Officer's pay, one third of Office Establishment, Laboratory section and packing section) . .		10,002-9-11
Feeding charges (1/3 of the whole cost is taken) .		8,102-12-4
Contingencies (of the whole cost is taken)		5,053-0-9

Chemicals (1/3 of the whole cost is taken)	925-3-8
Travelling allowance ($\frac{1}{2}$ of the whole cost is taken) . .	1,299-3-0
Total gross cost	Rs.64,023-2-8
Deduct receipts from the sale of done calves and carcasses.	6,567-3-0
Net cost	Rs.57,455-15-8

10 The ~~10,19,150~~ 9,52,175 c.c. actually sanctioned c.c. of Virus produced costed Rs.57,455-15-8 working nearly at 0-0-11 per c.c. of Virus.

11 By the sale of 16,230 c.c. of Virus to Madras Civil Veterinary Department during July, August, September, October 1928, March and April 1929, Rs.1,077-3-0 was realised, which, if deducted from the cost of production, would reduce ~~be nearly 0-0-10½ per c.c.~~ the cost to the State to about 11 pies per c.c

12 SERUM. It was originally proposed to prepare 8 lakhs doses of Serum. Later on, revised proposals were submitted to prepare 18 lakhs doses of Serum to meet the increasing demand of the Civil Veterinary Department.

13 Ex-buffaloes were made use of as usual and the total number bought during the year was 1,307; the number used for producing Serum was 1,244, and the rest were made use of at the beginning of the current year and some were in the process of immunisation at the end of the year. Of them, 350 animals died. The

The quantity of Serum produced was 17,68,361 doses, of which 1,50,000 doses were sold to Madras Civil Veterinary Department, as the Department wanted it very badly and as we had sufficient stock on hand at the time to meet the demand of the Mysore Civil Veterinary Department.

14 The quality of Serum was maintained right throughout the year. The dose of Serum advised after test was 30 c.c. per 600 lbs. body weight except in the case of one brew, a very potent Serum, which protected the animals at 20 c.c. per 600 lbs. body weight.

Quantity of Serum produced during the year.	. .	17,68,361 doses
Quantity supplied to Mysore Civil Veterinary Department.		14,98,040 "
Quantity supplied to Madras Civil Veterinary Department.		1,50,000 "
Quantity of Serum used in the Institute.	.	26,910 "
Quantity of Serum remaining on 1st July 1929.	.	90,000 "

Cost of buffaloes used.	.	Rs.47,990-0-0
Establishment charges (Pay of the Serum section, half of Officer's pay, two-thirds of Office establishment, Laboratory section and packing section)	.	Rs.18,001-13-10
Feeding charges (2/3 of the whole cost is taken)	.	Rs.16,205-8-7
Contingencies ($\frac{1}{3}$ of the whole cost is taken).	. .	5,053-0-10
Chemicals (2/3 of the whole cost is taken).	. .	1,970-7-5

Travelling allowance (½ of the whole cost is taken). . .	Rs.1,299-3-0
Total gross cost	Rs.90,520-1-8
Deduct receipts from the sale of done buffaloes and carcasses	Rs.11,378-4-0
Sale of manure. . .	101-0-0
Net cost	Rs.79,040-13-8

25 Total net cost of for producing 17,68,361 doses of Serum is was Rs.79,040-13-8 working out at about 0-0-8½ per dose. By the sale of 1,50,000 doses of Serum to Madras Civil Veterinary Department, during the months of November, and December 28, and June 1929, Rs.28,209-6-0 was realised, which if deducted from the net cost, would give a net cost to the of the ~~the average cost of production would be about 0-0-8½ per dose.~~ of about 0-0-5½ per dose.

26 As the work of the Institute has been on the increase and as the accommodation has became too small, representations were sent, as a result of which it is now proposed to shift the Institute to a more extensive place near Hebbal ~~Agricultural farm, on Dodballapur road.~~ Experimental

V. Ba Narayana

OFFICER IN CHARGE,
MYSORE VETERINARY INSTITUTE.

-1

30

SUBJECT.....

Section C. 2

File No. 41-29

Serial No. 2.

No. D 3076 /Sec

Copy to A.D. Bpt. C.

Diary No. of letter replied to.....

General and Revenue Secretariat

( )

the *192*

To The Supdt Govt Printing Bangalore

Date of issue 15/11/29

Signed by for Secy

Sir

I am directed to forward herewith a Copy of the Adm Report of the Serum Institute for 28-29 for being ~~sent~~ set in type. ~~*~~ and the proofs of the report may be sent to the Dir: of Agriculture for appl.

List of enclosures.....

Copied by.....

Examined by.....

The Usual number of Copies ~~should be printed~~ printed and kept ready for being bound with the Report.

over I have the

D 3077 15/11/29

Copy to the Dir of Agri:

WD068—GTB—20,000—1-8-28

for Secy

5 Copies

C.V-41-29-3

Proceedings of the Government of H.H. the Maharaja of Mysore.

...

Read :-

Letter No.Per.45/29-30 dated 10th September 1929 from the Director of Agriculture in Mysore, submitting the annual report of the Serum Institute for the year 1928-29.

---:0:---

Order No.D. 63 [illegible]

Dated, [illegible]

Recorded.

The Budget Estimates for the year were framed on the basis that 8 lakhs of doses of Anti-rinderpest Serum would be required for the use of the Veterinary Department during the year, Owing, however, to a severe outbreak of Rinderpest, the severest the State has yet experienced since the establishment of the Civil Veterinary Department, it became necessary to raise the estimate to eighteen lacs of doses at a total cost of Rs.1,80,000. Against this estimate, 17,68,361 doses were actually produced and production would have exceeded the estimate but for the unfortunate fact that work had to be stopped for some time owing to the outbreak of disease among the Institute animals, caused by the lack of sufficient accommodation for them. Arrangements are, now ~~however,~~ in progress to transfer the Institute from its present ~~xxxx~~ unsatisfactory premises in the compound of "Race View" on the Race Course Road to buildings to be specially constructed for the purpose on up-to-date

lines and ~~amidst~~ spacious grounds adjoining the Hebbal Agricultural Farm and it is hoped that the transfer will be effected before the close of the current year.

The work of the Institute during the year has, on the whole, been satisfactory, and in addition to supplying local needs, 1½ lacs of doses were sold to the Madras Veterinary Department in part compliance with their indent.

Government wish to express their appreciation of the efficient manner in which the work of the Institute has been conducted under difficult conditions by Dr. Parthasarathi and his staff and trust that better progress will be achieved during the current year.

23 11 29

Secretary to Government,
Development Departments.

To

The Director of Agriculture in Mysore
The Senior Surgeon

RK/16-11-29.

Appendix F G—1

SUBJECT.....

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Section CV

File No. 41 - 29

Serial No. 5

No. 8561

Diary No. of letter replied to..... 2297

Compl

General and Revenue Secretariat

( )

the *192*

To The Director of Agriculture

Date of issue 2.1.30 Dear Sir, Dr Clemens,

Signed by N. Rama Rao

Adverting to your letter No Ser 45/29-30 dt 10.9.29 forwarding ~~the~~ the annual report on the Working of the Serum Institute, I am desired ~~directed~~ to request you to be so good as to examine whether something cannot be done to reduce the mortality rate among the Buffalo calves used for the operations connected with the production of serum in view

List of enclosures.....

Copied by.....

Examined by.....

over

~~I have~~ am also to observe
that the marching of these
calves, when already exhausted
by the operations, down to
Subrahmanya Jatra & back
seems to have been
~~both~~ a very ill-advised step. ~~and~~
~~Again should not have been~~
~~I trust I may be~~ resorted to. It
is hoped that such experiments
~~the Experiment~~ are not be repeated in future
~~is not being repeated~~.

~~Yours truly~~

I am to add that
Govt are fully appreciative
of the excellent work done
by the Serum Asst., and
of the difficulties under
which the staff worked,
and that the above
remarks shd
not be taken
as detracting from
their appreciation
of the good work
done.

Yours sincerely

for Dy Secy
27.1.30

C.V. 41-29-6

Refer

DEPARTMENT OF AGRICULTURE, MYSORE STATE.

D. O. No. Per No. 45 of 29-30 Confidential.

Telegraphic Address,
"AGRI., BANGALORE."
Code: 5TH EDITION A.B.C.

6640

OFFICE OF THE DIRECTOR,

DR. LESLIE C. COLEMAN, M.A., PH.D.,
Director.

Bangalore,.....192 .
February 4, 1930.

Dear Mr. Rama Rao,

Your D.O. letter No. 8561/Ed. 41-29-4. of the 31st. January has given me great pain. I cannot but feel that the reference to the movement of buffaloes to the Subrammanya Jatra would not have been made had Government been aware of all the facts of the case.

In the first place, I may note that of the animals sent to Subrammanya Jatra numbering 210, two thirds or 140 were not buffalo calves but full grown buffaloes. Moreover, they were not already exhausted by the operation, but were recovered and were in fairly good condition. Had that not been the case, there would have been no prospect of sale at a jatra. The animals were marched in easy stages under the supervision of an experienced veterinary officer Mr. C. Ranganna, who is a native of Manjarabad Taluk and who is thoroughly conversant with conditions there and with the marching of animals. There were it is true 28 deaths on the way, but of these a very few (only 5) were among the calves. The deaths were owing to unexpectedly inclement weather. Deaths, I may say were not confined to the animals marched but took place also among the animals left behind in the neighbourhood of Bangalore and the strong probability is that the marching was in no way responsible for the deaths.

The movement of these buffaloes was not sanctioned by me until I had made as careful enquiries as possible. Not only did I consult the Superintendent of the Civil Veterinary Department, who, through his District Staff might be expected to know local conditions; I also consulted some of the leading men of Hassan District including Messrs. Manjandian and S. Venkatesaiya. All were agreed that the chances of profitable sale of buffaloes at this jatra were extremely bright and advised me to make an experiment in this connection.

Had we not experienced very great difficulty in selling these buffaloes locally, had they not been fetching ~~extremely~~ an extremely low price and had I not been morally certain that they were practically all finding their way to butchers, I should not have sanctioned the proposal. It seemed to me that these conditions warranted an attempt to place these animals where they might be used more profitably than as butcher's meat.

The failure to sell all the animals at once was due to an outbreak of rinderpest at the jatra and the consequent closing of it. This was a circumstance which could hardly have been foreseen. To be informed by you now that the action was a very ill-advised step seems, if I may be permitted to say so, under the circumstances, hardly fair to me or the staff working under me.

As to the question raised in the first sentence of your letter, I may say that under the extremely unfavourable conditions under which work had to be carried on at the Serum Institute and is still being carried on I do not consider it possible to reduce the rate of mortality. We have had to carry out operations on a scale at least three times as large as has been warranted by the accommodation at our disposal. We have had to keep reserve animals in two different places, the Bettnalli Kaval and a reserve depot in Bangalore both of which had to be improvised at short notice. The " done " animals have had to be kept at two other places removed at a considerable distance from the first two, where similar improvised arrangements have had to be made. Moreover, by far the greatest mortality has occurred among the virus producers, in the case of which, the disease must be allowed to take its course. When along with this, we take the heavy bleeding that has to be practised, the wonder is that any survive.

Had we been able to double the staff, quadruple the accommodation, and reduce the amount of blood drawn from each animal to a few ounces, we should have been able to save a good many of the animals which have died; but this would have increased the cost of production ~~by~~ at least five times and reduced the production to a fraction of the output for the past year. That would have resulted in the loss of a huge number of the work cattle

which have been saved to the raiyats of the State.

If and when we shall be able to move the Serum Institute to something like suitable quarters, a step which I believe, you will be prepared to admit, I have been attempting to hasten in every manner possible, we shall undoubtedly ~~able~~ be able to arrange more favourable conditions for our cattle, both before and after use. Until that transfer is made, I can hold out no hopes of any very marked decrease in the mortality of these animals.

Yours sincerely,

Leslie Lobo Lemon

N.Rama Rao, Esq. B.A., B.L.,

Secretary to the Government of

H.H. the Maharaja of Mysore,

Development Departments,

Bangalore.

Appendix G—1

SUBJECT.....

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37

Diary No. of letter replied to.....

General and Revenue Secretariat

( )

the *192*

Date of issue 6/3/30

Signed by V.S. Parthasarathy

List of enclosures.....

Copied by.....

Examined by.....

Section CW.

File No. 41-29

Serial No. 7

No. D 1015/Home

To The Supdt. Govt. Printing

Bangalore

I am directed to forward herewith a Copy of Govt No D 6391-92 CW 41-29-3 dt 10.12.29 reviewing the Administration Report of the Servants Institute for necessary action in continuation of this letter No D 3076/CW 41-29-28 dt 18.9.29.

I have &c

CW 3/3/30

for Dy Secy

VS

over

WD 068—GPB—20,000—1-8-29